

Rejections under 35 U.S.C. § 112, second paragraph

Claims 10, 11, 13, and 14 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Applicant overcomes the rejection as follows.

Referring to FIGS. 4A-4B and the Specification (Page 5, lines 13-18), Applicant's Claims 10 and 11 set forth the stopper able to be moved to a proper position along the shaft corresponding to the length of the magnet without increasing the rotational inertia of the rotor. Hence, the Applicant respectfully submits that Claims 10 and 11 have described the subject matter clearly, such that a person of ordinary skill in the art would be able to make and/or use the present invention in accordance with the claims. Accordingly, Claims 10 and 11 are in condition for allowance.

Rejection under 35 U.S.C. § 103(a)

Claims 10, 11, 12 and 13 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Agematsu et al. patent (U.S. Patent 6,208,047) in view of Matsuhima patent (U.S. Patent 6,005,311). Applicant respectfully submits that the references cited by the Examiner do not render the present invention obvious.

Applicant could find no teaching or suggestion in the cited references which discloses Applicant's invention. Accordingly, Claims 10 and 11 are therefore allowable over Agematsu et al. in view of Matsuhima.

Claim 13 depends from Claim 10 and is therefore allowable for at least the same reasons as Claim 10. Claim 14 depends from Claim 11 and is therefore allowable for at least the same reasons as Claim 11.

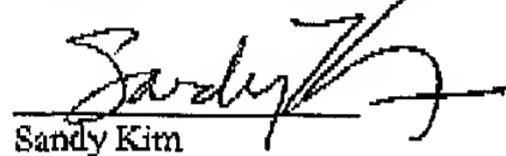
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CONCLUSION

Pending Claims 1-4, 6-9 and 12 are allowed. For the above reasons, Claims 10, 11, 13 and 14 are now in condition for allowance and allowance of the application is hereby solicited. If the Examiner has any questions or concerns, the Examiner is hereby requested to telephone Applicant's Attorney at (949) 752-7040.

## Certification of Facsimile Transmission

I hereby certify that this paper is being facsimile transmitted to the U.S. Patent and Trademark Office on the date shown below.

  
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February 11, 2003

Respectfully submitted,



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ATTACHMENT A - VERSION WITH MARKINGS TO SHOW CHANGES MADE

10. (Twice Amended) A stepping motor structure, comprising:

a rotor; and

a stator having a plurality of coils for causing the rotation of said rotor, wherein said rotor comprises:

a magnet having a first annular wall;

a magnet holder having a base and a second annular wall connected with said first annular wall of said magnet for fixing said magnet;

a shaft having one end mounted through said base of said magnet holder; and

a stopper for supporting and fixing the other end of said shaft,

v0 - said stopper positioned in one location within a range of possible locations [on said shaft] to maintain a relatively low rotational inertia, said one location [being a function of the height] corresponded to the length of said magnet.

11. (Three Times Amended) A rotor-stator assembly of a stepping motor having a relatively low inertia, comprising:

a rotor; and

a stator having a plurality of coils for causing the rotation of said rotor, wherein said rotor comprises:

a magnet having a first annular wall;

a magnet holder having a base and a second annular wall connected with said first annular wall of said magnet for fixing said magnet;

a shaft having one end mounted through said base of said magnet holder; and

a stopper for supporting and fixing the other end of said shaft,

said stopper [positioned] positionable along said shaft in one location within a range of possible locations [on said shaft] to maintain a relatively low rotational inertia, said one location [being a function of the height] corresponded to the length of said magnet.

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